

**WHAT IS CLAIMED IS:**

1. An optical wireless transmission apparatus comprising: a light emitting section which emits a light  
5 signal toward a target apparatus; a light receiving section which receives the light signal emitted from the target apparatus; and a pilot light emitting section which emits a pilot light to the target apparatus, the pilot light emitted from the target apparatus being received by the light  
10 receiving section to detect an emission direction of the pilot light and to emit the light signal in the detected emission direction,

wherein the pilot light emitting section emits the pilot light in a wavelength region of 930 nm to 960 nm, and  
15 the light receiving section comprises a light receiving device having a light receiving sensitivity only to the wavelength region of 930 nm to 960 nm.

2. The optical wireless transmission apparatus  
20 according to claim 1, wherein the light receiving device comprises: a light receiving layer formed of GaInAsP having a band gap energy corresponding to 960 nm on an InP substrate; and a light absorbing layer formed of GaInAsP having a band gap energy corresponding to 930 nm on the light receiving  
25 layer.

3. An optical wireless transmission apparatus comprising: a transmission section which emits a light signal modulated by a data signal toward a target apparatus; a light  
30 receiving section which receives the light signal emitted from the target apparatus and which demodulates the light signal into the data signal; and a pilot light emitting section which emits a pilot light to the target apparatus, the pilot light emitted from the target apparatus being

received by the light receiving section to detect an emission direction of the pilot light and to emit the light signal in the detected emission direction,

wherein the pilot light emitting section emits the  
5 pilot light in a wavelength region of 930 nm to 960 nm, and  
the light receiving section comprises a filter which passes only a light in the wavelength region of 930 nm to 960 nm.

10 4. An optical wireless transmission apparatus comprising: a transmission section which emits a light signal modulated by a data signal toward a target apparatus; a light receiving section which receives the light signal emitted from the target apparatus and which demodulates the light  
15 signal into the data signal; and a pilot light emitting section which emits a pilot light to the target apparatus, the pilot light emitted from the target apparatus being received by the light receiving section to detect an emission direction of the pilot light and to emit the light signal in  
20 the detected emission direction,

wherein the pilot light emitting section emits the pilot light in a wavelength region of 930 nm to 960 nm, and  
the light receiving section comprises: a filter which passes only a light having a wavelength of 930 nm or more;  
25 and a light receiving device having a light receiving sensitivity only to a wavelength of 960 nm or less.